HAZARD IDENTIFICATION CHECKLIST

Check items for which there is anticipated need.

Flammable Gases or Liquids		Other Gas Emissions		Hazardous Chemicals		Other Hazardous /Toxic Materials
Type:		Type:			Cyanide plating materials	List hazardous/toxic materials planned for use in a beam line or an experimental enclosure:
Flow rate:		Flow rate:			Scintillation Oil	
Capacity:		Capacity:			PolyChlorinatedBiphenyls	
Radioactive Sources		**Target Materials**			Methane	
	Permanent Installation		Beryllium (Be)		TMAE	
	Temporary Use		Lithium (Li)		TEA	
Type:			Mercury (Hg)		photographic developers	
Strength:			Lead (Pb)		Other: Activated Water?	
Lasers			Tungsten (W)	**Nuclear Materials**		
	Permanent installation		Uranium (U)	Name:		
	Temporary installation		Other:	Weight:		
	Calibration	**Electrical Equipment**		**Mechanical Structures**		
	Alignment		Cryo/Electrical devices		Lifting Devices	
Type:			Capacitor Banks		Motion Controllers	
Wattage:			High Voltage (50V)		Scaffolding/ Elevated Platforms	
Class:			Exposed Equipment over 50 V		Other:	
			Non-commercial/Non-PREP			
			Modified Commercial/PREP			
Vacuum Vessels		**Pressure Vessels**		**Cryogenics**		
Inside Diameter:		Inside Diameter:			Beam line magnets	
Operating Pressure:		Operating Pressure:			Analysis magnets	
Window Material:		Window Material:			Target	
Window Thickness:		Window Thickness:			Bubble chamber	

NUCLEAR MATERIALS

Reportable Elements and Isotopes / Weight Units / Rounding

Name of Material	MT Code	Reporting Weight Unit Report to Nearest Whole Unit	Element Weight	Isotope Weight	Isotope Weight %
Depleted Uranium	10	Whole Kg	Total U	U-235	U-235
Enriched Uranium	20	Whole Gm	Total U	U-235	U-235
Plutonium-242[1]	40	Whole Gm	Total Pu	Pu-242	Pu-242
Americium-241[2]	44	Whole Gm	Total Am	Am-241	–
Americium-243[2]	45	Whole Gm	Total Am	Am-243	–
Curium	46	Whole Gm	Total Cm	Cm-246	–
Californium	48	Whole Microgram	–	Cf-252	–
Plutonium	50	Whole Gm	Total Pu	Pu-239+Pu-241	Pu-240
Enriched Lithium	60	Whole Kg	Total Li	Li-6	Li-6
Uranium-233	70	Whole Gm	Total U	U-233	U-232 (ppm)
Normal Uranium	81	Whole Kg	Total U	–	–
Neptunium-237	82	Whole Gm	Total Np	–	–
Plutonium-238[3]	83	Gm to tenth	Total Pu	Pu-238	Pu-238
Deuterium[4]	86	Kg to tenth	D_2O	D_2	
Tritium[5]	87	Gm to hundredth	Total H-3	–	–
Thorium	88	Whole Kg	Total Th	–	–
Uranium in Cascades[6]	89	Whole Gm	Total U	U-235	U-235

[1] Report as Pu-242 if the contained Pu-242 is 20 percent or greater of total plutonium by weight; otherwise, report as Pu 239-241.

[2] Americium and Neptunium-237 contained in plutonium as part of the natural in-growth process are not required to be accounted for or reported until separated from the plutonium.

[3] Report as Pu-238 if the contained Pu-238 is 10 percent or greater of total plutonium by weight; otherwise, report as plutonium Pu 239-241.

[4] For deuterium in the form of heavy water, both the element and isotope weight fields should be used; otherwise, report isotope weight only.

[5] Tritium contained in water (H2O or D2O) used as a moderator in a nuclear reactor is not an accountable material.

[6] Uranium in cascades is treated as enriched uranium and should be reported as material type 89.

OTHER GAS EMISSION

Greenhouse Gasses (Need to be tracked and reported to DOE)

- Carbon Dioxide, including CO_2 mixes such as Ar/CO_2
- Methane
- Nitrous Oxide
- Sulfur Hexafluoride
- Hydro fluorocarbons

- Per fluorocarbons
- Nitrogen Trifluoride